

(12) **UK Patent Application** (19) **GB** (11) **2 367 486** (13) **A**

(43) Date of A Publication 10.04.2002

(21) Application No 0024248.7

(22) Date of Filing 04.10.2000

(71) Applicant(s)

**Michael Howells**  
**17 Clarkes Avenue, Pye Green, HEDNESFORD, Staffs,**  
**WS12 4LD, United Kingdom**

(72) Inventor(s)

**Michael Howells**

(74) Agent and/or Address for Service

**Michael Howells**  
**17 Clarkes Avenue, Pye Green, HEDNESFORD, Staffs,**  
**WS12 4LD, United Kingdom**

(51) INT CL<sup>7</sup>

**A46B 9/06**

(52) UK CL (Edition T )

**A4K KCA**

(56) Documents Cited

**GB 2294871 A**

**US 5937471 A**

**US 5517710 A**

**US 4422202 A**

(58) Field of Search

**UK CL (Edition S ) A4K KCA KCB**

**INT CL<sup>7</sup> A46B 9/06 15/00 , A47L 13/12**

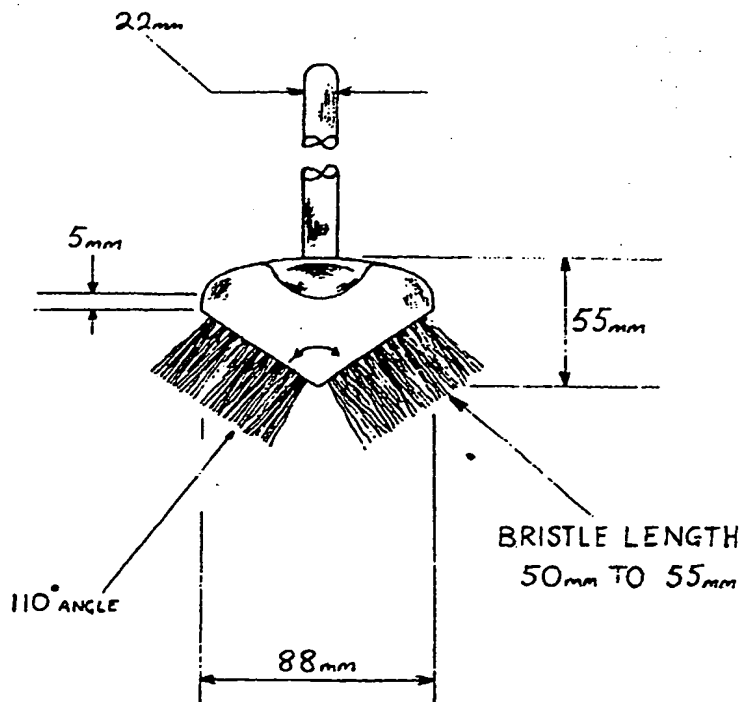
**Online: WPI, EPODOC, JAPIO**

(54) Abstract Title

**Broom with two usable surfaces**

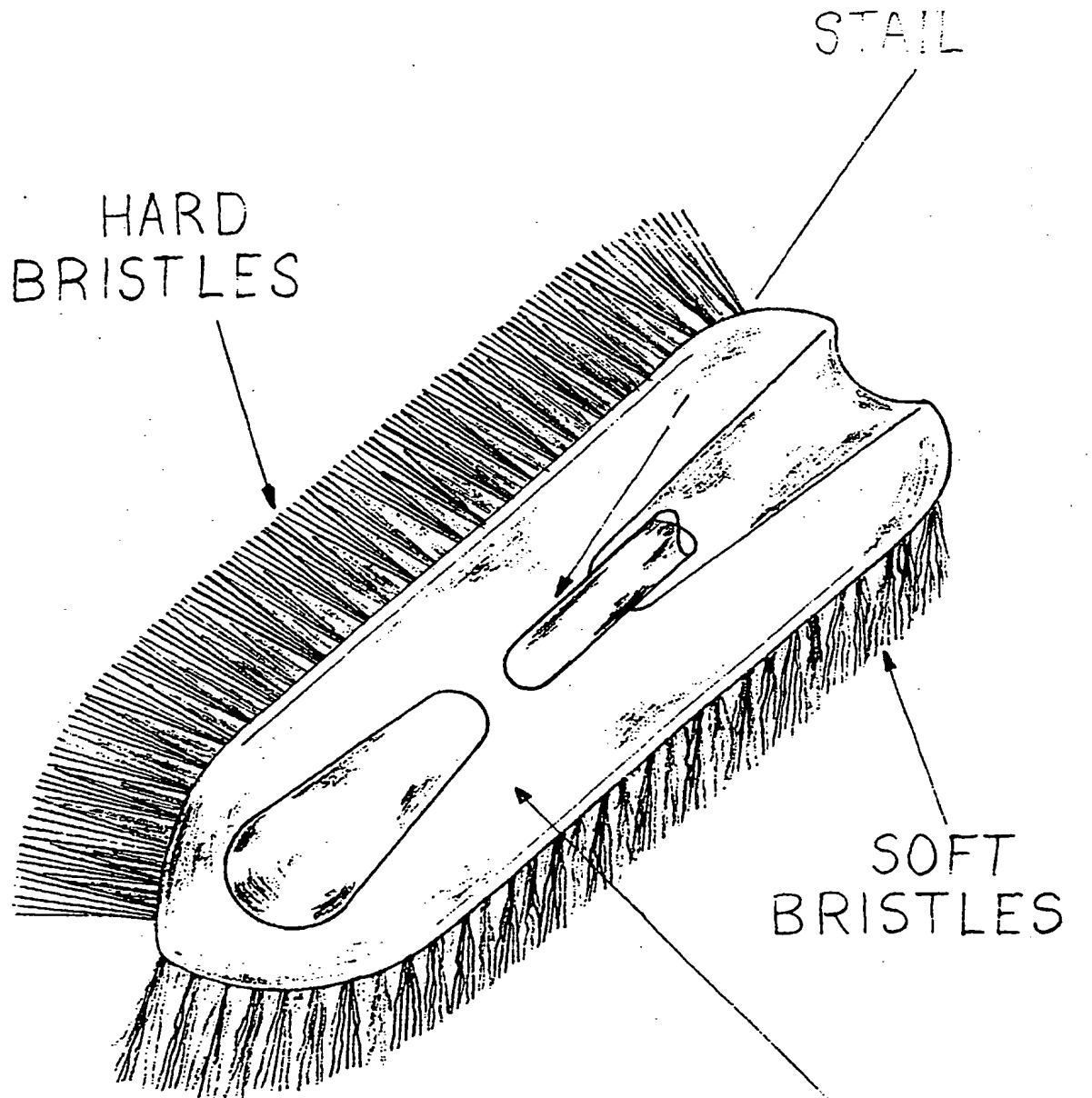
(57) A broom comprises a dual purpose head of 'v' shaped appearance with rounded top and ends shaped or moulded from lightweight wood or plastic with a stale mounted in the centre, soft bristles protruding from one side of the head and hard bristles protruding from an opposite side which allows one set of bristles to clear the ground during use. Rotation of the head through 180 degrees allows opposing bristles to face the ground when required. Preferably the ends of the head are rounded through both axis which allows the bristles to protrude at a greater angle to assist corner sweeping. Preferably the broom functions as both a hard and soft bristle broom combined in one compact head. The bristles may be of hard nylon or soft coconut hair.

**Fig 3**  
**END VIEW**



**GB 2 367 486 A**

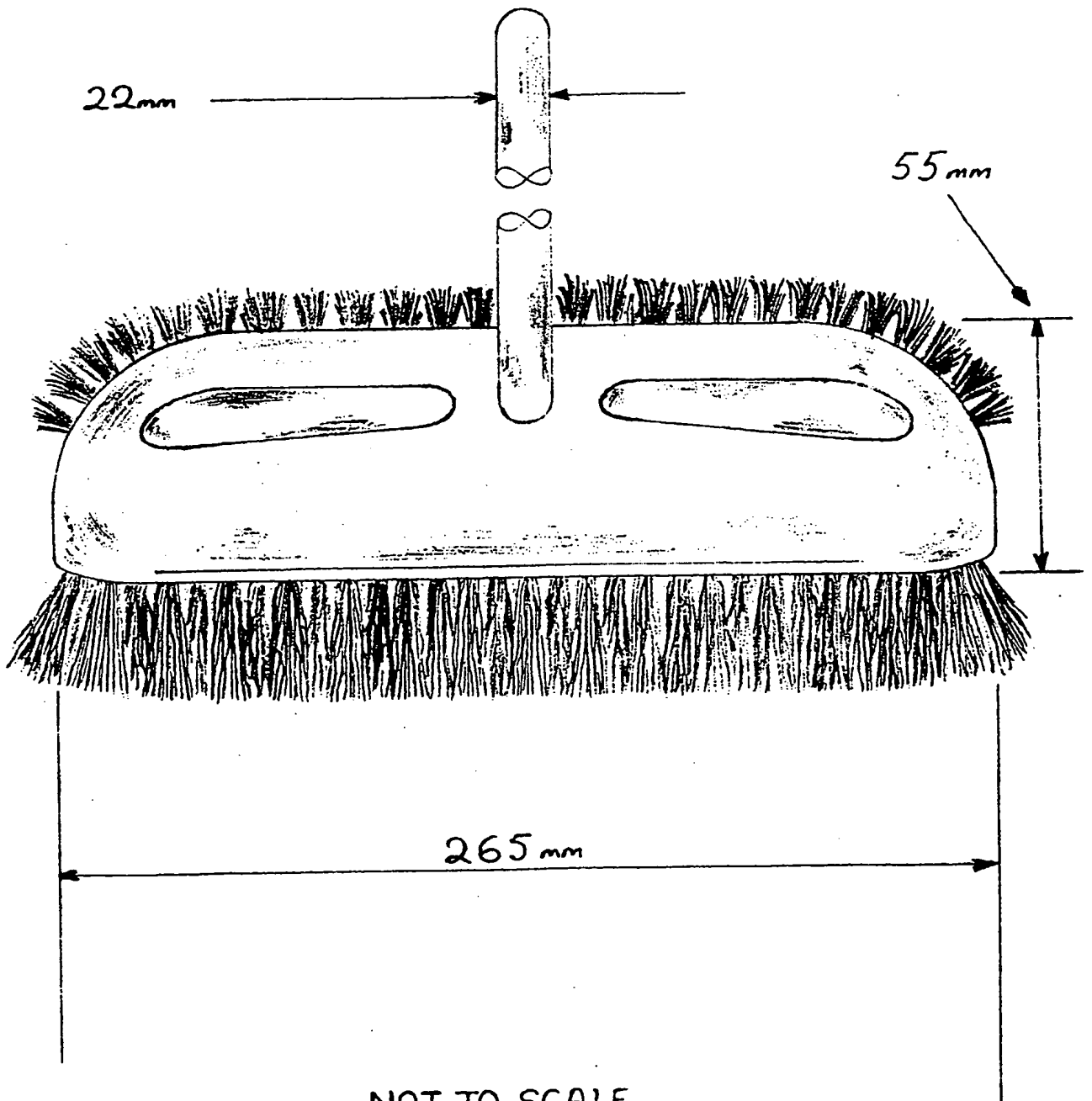
Fig 1  
THE UNIBROOM



NOT TO SCALE

214

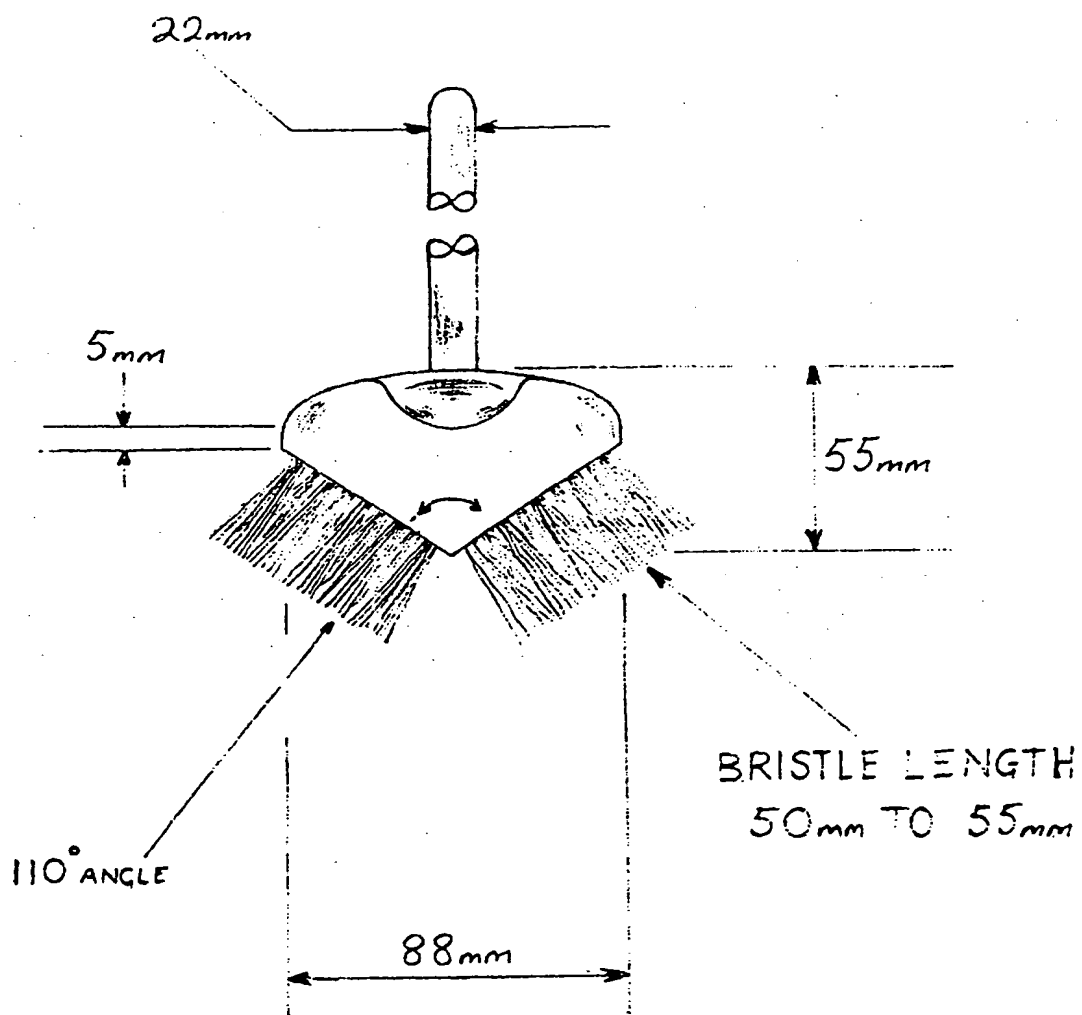
Fig 2  
FRONT VIEW



NOT TO SCALE

314

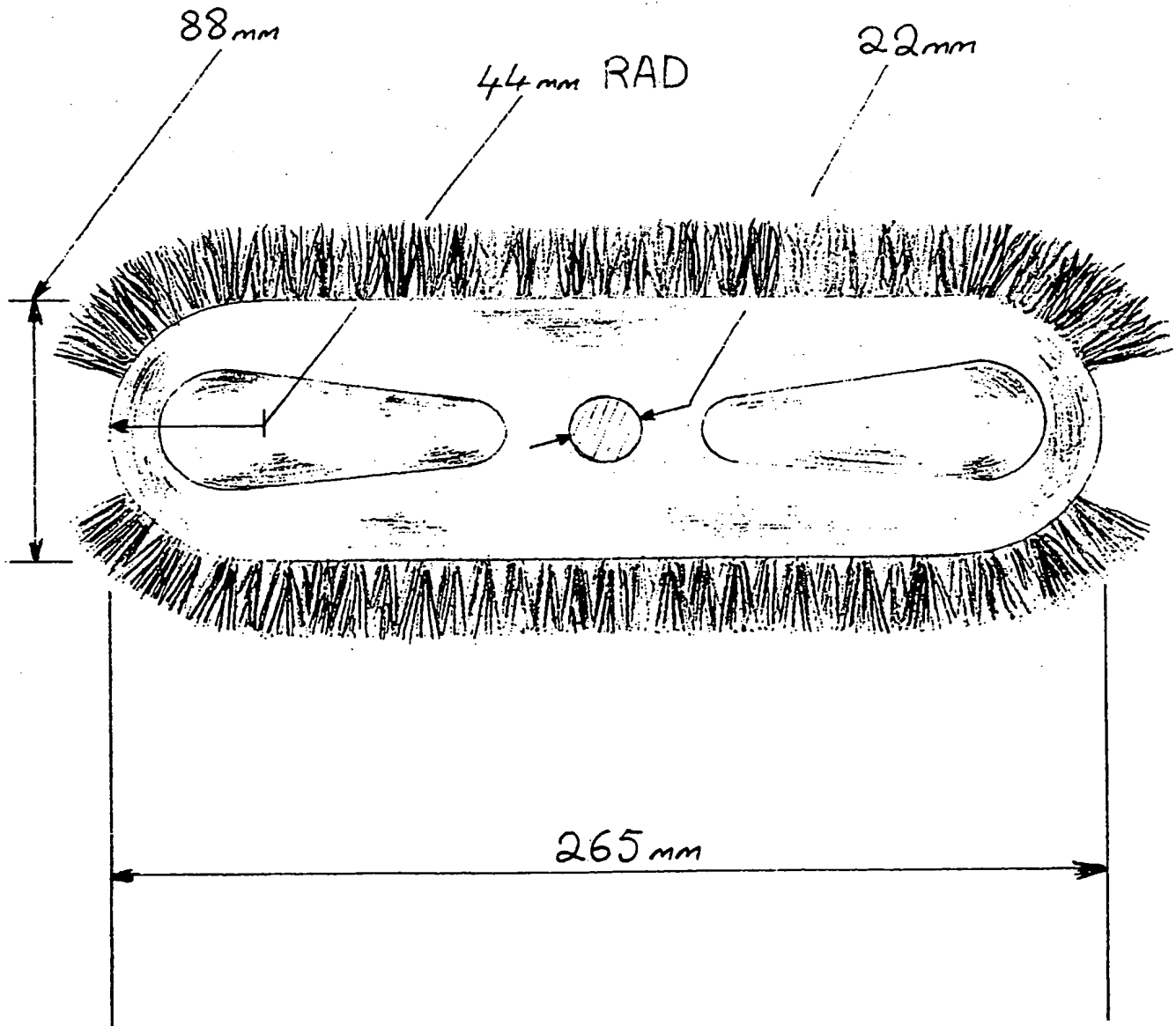
Fig 3  
END VIEW



NOT TO SCALE

414

Fig 4  
TOP VIEW



NOT TO SCALE

**THE UNIBROOM.**

This invention relates to the UNIBROOM for the universal sweeping of various floor surfaces.

It is well understood that different indoor or outdoor surfaces require the use of soft or hard bristle brooms for sweeping away dirt and dust etc. This is normally achieved by the purchase of both soft and hard bristle brooms.

The UNIBROOM has been invented as a dual purpose broom to achieve the functions of both hard and soft bristle brooms but combined into one compact head. The UNIBROOM comprises of a single compact head with both soft and hard bristles set at an opposite angle of 110 degrees to produce a comfortable universal sweeping action. Due to the shape of single head the UNIBROOM can then be rotated through 180 degrees to acquire the desired sweeping bristles i.e. soft or hard.

Fig 1 shows the UNIBROOM'S dual purpose sweeping head and stale.

Fig 2 shows the front view of the UNIBROOM'S head with the relevant dimensions.

Fig 3 shows the end view of the UNIBROOM'S head with relevant dimensions.

Fig 4 shows the top view of the UNIBROOM'S head with relevant dimensions.

### **CLAIMS.**

- (1) The Unibroom comprises of a dual purpose head which has a vee shaped appearance with rounded ends and a rounded top. as Figure 1. The single head is shaped or moulded in lightweight wood or plastic with the stale mounted in the centre. Both soft and hard bristles protrude from its head at an opposite angle of 110 degrees to each other. The angle leaves one set of the Unibroom's bristles to be clear of the ground at any given time.**
- (2) As claim 1 the Unibroom's dual purpose head has been designed with the capability of allowing either its soft or hard bristles to face the ground when desired.**
- (3) The universal sweeping action as claims 1 and 2 is acheived by a simple rotation of the head through 180 degrees until the opposing bristles face the ground.**
- (4) To aid the universal sweeping action as claim 2 and 3 the ends of the Unibroom's head are appropriately rounded through both axis to assist corner sweeping. Whilst the ends of the head are rounded the bristles protrude at a greater angle.**
- (5) The Unibroom as in claims 1 to 4 consists of hard nylon bristles one side of the head and soft coconut hair the other.**



INVESTOR IN PEOPLE

Application No: GB 0024248.7  
Claims searched: 1 - 5

Examiner: Beverley Lloyd  
Date of search: 3 October 2001

## Patents Act 1977 Search Report under Section 17

### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.S): A4K (KCA, KCB)

Int Cl (Ed.7): A46B 9/06, 15/00; A47L 13/12

Other: Online: WPI, EPODOC, JAPIO

### Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2294871 A (RACINE) See Figs 1 & 3b; page 4, lines 26 - 27; page 9, line 26	1 - 3 & 5
A	US 5937471 A (LIAO)	
A	US 5517710 A (HISEY)	
X	US 4422202 A (MALVASIO) See Figs 1 & 3; col 2, lines 43 - 45	1 - 5

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.